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DETERMINATION OF ORGANIZATIONAL AND ECONOMIC DETERMINANTS OF THE CURRENT STATE AND DEVELOPMENT TRENDS OF AGRICULTURAL PRODUCERS IN POLAND AND UKRAINE

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Abstract. The experience of highly developed countries proves that agricultural producers are one of the stabilizing factors of the socio-economic relations of states as a whole. In the context of effective management of agricultural producers in Ukraine and Poland, it is important to find out the features and trends of their modern development. A number of tools have been involved to stimulate the development of agriculture, which include: improvement of institutional support; infrastructure development of rural areas; implementation of financial instruments for the development of agriculture; provision of personnel at agricultural producers. The subject of our economic research interests is the characterization of organizational and economic determinants and a comparison of the development trends of agricultural production in Poland and Ukraine in the context of modern food security challenges. The results of the calculations can be taken into account for operational and strategic planning of the behaviour of agricultural producers. The aim of the investigation is to outline the development trends of agricultural producers in Ukraine and Poland and to develop approaches to ensure their effective functioning. A systematic approach to the study of conditions and factors that comprehensively affect the development of agricultural producers has been applied. The research uses a comparative analysis of the main economic indicators of the activity of agricultural producers in Ukraine and Poland. A comprehensive approach allowed us to conduct a study of the main indicators of the activity of agricultural producers with the inclusion in their production activity of the entire set of social and production components. The study confirms the better performance of the Polish agricultural sector than the Ukrainian one in 2010-2020. It suggests potential benefits from the use of Polish experiences by Ukrainian producers. Integration processes are characteristic of all sectors of the economy, but in agriculture, based on the specifics of the sector, and as the experience of enterprises in Poland and the Lublin Voivodeship shows, provide positive results, both for agricultural producers themselves and for society as a whole.

Keywords: agricultural, crop yield, livestock products, crop products, development trends.

JEL Classification: Q12; Q17; O13

1. INTRODUCTION

The modern world, despite wars and global crises, such as the COVID-19 pandemic, strives to create a model of agricultural development based on the principles of sustainable development. At the same time, the realization of the potential of the economy and the agrarian sector takes place most productively in the conditions of the market - a multifaceted socio-economic system that functions on a

competitive basis due to the development of agricultural producers. The concept of sustainable development is recognized in the scientific world as the theoretical basis for learning a perspective model of the world socio-economic order. At this stage, the concept is considered as an all-encompassing intellectual theory; construction of the mechanism of development of society, economy, agricultural producers and agriculture. This aspect of scientific research is consistent with the scientific and practical tasks currently facing society, the rural sector of the national economy. It will contribute to the achievement of the sustainable development goals defined by the UN for the period up to 2030, regarding the development of principles and the creation of mechanisms for balancing the interests of market participants and the development of agricultural producers.

The development of the basics of the raised problem has been carried out by many scientists, but the situation with the definition of criteria and factors of the current state and development of agricultural producers gives grounds for expanding the subject area of scientific research - by segments of market research, agricultural enterprises, sustainable development and the agricultural sector. That is why it cannot be considered theoretically and methodologically solved, the consequence of this is the availability of peculiarities related to the production of agricultural products, because it needs further scientific improvements due to the study of the best practices of agricultural producers in Poland.

The urgency of researching the activities of agricultural producers in Ukraine and Poland is due to the strengthening of competition in the food market and the integration of Ukraine into the international economic space, which necessitates the formation of a new model of agricultural development, especially its export-oriented industries. Therefore, today there is a need for thorough research: increasing productivity in conditions of limited resources; studying the best practices of agricultural producers in Poland; the development of new logistics routes due to the lack of access to the sea and the loss of Russian sales markets.

Today, special attention is paid to the development problems of agricultural producers working in rural areas (Brockova et al., 2021); (Shpykuliak & Sakovska, 2022); (Sas et al., 2022); (Crowder & Reganold, 2015); (Balaniuk & Ivaniuk, 2020); (The future of food 2017); (Boryshkevych & Yakubiv, 2023). Thanks to this, the approach of scientists to the study of this problem becomes clear. But, despite a large number of scientific works, the development of theoretical and practical foundations of the current state of management of agricultural producers in Ukraine and Poland and the comparison of their experience remains a debatable and unresolved issue.

World experience confirms the high economic efficiency of agricultural producers and their social orientation (Perovych et al., 2020). However, in Ukraine, the advantages and positive aspects (Yatsiv & Kolodiichuk, 2018) of agricultural producers are not fully distributed. Although every agricultural producer in the process of production has to overcome significant problems related to deficiencies in material and technical support, negative influence of competitors (Shpykuliak & Bilokinna, 2019) and intermediaries, etc. (Sas, 2019). Among the proposed solutions for the effective development of agriculture (Miniszewski, 2021), the need for investments in infrastructure and technological innovations will be constantly relevant, and the need for the use of drones for the analysis of remote areas and the digitization of all supply processes will also gradually arise in agriculture (Kutwa, 2021). Lisowska R. (2020), emphasizes that agricultural producers should produce new products or improve their quality, cooperate and integrate their efforts to improve innovative methods of organization at rural enterprises.

In the conditions of the war, agricultural producers of Ukraine faced such basic problems as: lack of stable and projected sale of grown products; migration of women of working age abroad; participation of men of working age in military operations; hindering material and technical support of production; logistical problems (during the war); uncertainty and risk (Kijek, 2013); development of social infrastructure; providing the villagers with work; limited export (Dligach & Lissitsa, 2022), unsown areas of agricultural land due to (contaminated by products of explosions and military actions); lack of liquidity; uncertainty, instability of partnership cooperation (Shchur & Kropelnytska, 2022). etc.

The previously unresolved directions of development identified by scientists mainly related to the pre-war period and were only part of the general problem, they lacked a comprehensive analysis of the modern information and communication situation of Ukrainian-Polish cooperation realities.

2. MATERIALS AND METHODS

Ensuring the effective functioning of agricultural producers requires a reasonable analysis and evaluation of their activities in Ukraine and Poland, determination of parameters and prospects for their development.

The methodological basis of the research will be a systematic method of knowledge built on the historical experience of the development of integration processes in the agrarian sphere of the economy of Ukraine and Poland, where it will be appropriate to consider the peculiarities of their functioning and the economic characteristics of agricultural producers. Currently, it is appropriate to single out the basics of input of measures targeted at effective overcoming drawbacks, positive attitude of the negative consequences of the past. It should focus on avoiding such shortcomings of the future.

A systematic approach in agricultural activity will involve the rational use of resources; the expediency of their use has aimed at achieving a single goal and has therefore considered as a single entity, as a system. A qualitatively new structure can be a complex system as a set of interconnected subsystems that perform different functions, but are aimed at solving a common task.

General scientific and specific research methods have used for a reasonable study of the activities of agricultural producers. The method of analysis and synthesis was applied to identify trends and regularities in the activities of agricultural producers of Ukraine and Poland, and based on this, the influence of factors on the performance indicators of their activities was investigated.

During the research, we use a comparative analysis of the main economic indicators of the activity of agricultural producers in Ukraine and Poland. To achieve the goal, we will use the State Statistics data of Ukraine the Central Statistical Office of Poland and Statistical Classification of the Economics of the EU.

The information about agricultural production was presented using the ways of activity method of agricultural activity in the field of crop and animal production conducted by economic entities in accordance to the included section of the NACE Rev. 2.

Our research is carried out quantitatively and qualitatively, taking into account the principles of complexity in the organization of the development of agricultural producers. In this study, the category "complexity" will be understood as the one that involves the inclusion in the production activity of the entire set of social and production components, which, acting as a whole, should ensure the achievement of a specific intermediate or final goal (Shelenko et al., 2022).

3. RESULTS AND DISCUSSION

The subject of our scientific interest is the analysis of the current state of activity of agricultural producers in Ukraine and Poland and the development of positive experience in conducting economy.

The aim of study is to reveal the development trends of agricultural producers in Ukraine and Poland and to develop approaches to ensure their effective functioning. The research conducted by us will also aim to show the main directions of activity of agricultural producers operating on the territory of Ukraine and Poland, identify directions of partnership cooperation and determine the main aspirations of one and the other side.

The task of our research will be:

- to carry out an analysis and assessment of the economic condition of agricultural producers of Ukraine and Poland;
- to investigate the influence of factors on the efficiency of the development of agricultural producers in Poland;
- to propose a mechanism for stimulating the development of agricultural producers in Ukraine

and Poland;

- to determine the strategic directions of development of agricultural producers.

In our work, there will also be a need to study what will achieve the current state of development of agricultural producers in Poland. Conducting the research will also make it possible to provide a qualitative assessment of the existing level of development and the specifics of agricultural producers in Ukraine and Poland.

Obtaining analytical data will also facilitate the decision-making process by agricultural producers for more effective activities and the dissemination of Polish experience to Ukrainian enterprises.

For comparison, we will analyze the activities of agricultural producers in Poland using the example of the Lublin Voivodeship and Ukraine using the example of the Ivano-Frankivsk Region. Agricultural producers of Poland were chosen for our research, because they have developed highly efficient agriculture, have experience of staying in the European Union; agricultural production is the basis of the economy; the activity is aimed at environmental protection; developed agriculture is an integral part of the tradition. For comparison, we also selected agricultural producers of Ukraine and those who conduct their activities in the Ivano-Frankivsk region. The economy of this region is quite diversified since the main branches of the economy are agriculture. Ivano-Frankivsk region ranks first in the investment attractiveness rating of regions of Ukraine. We consider such a comparison appropriate due to the fact that Lublin Voivodeship and Ivano-Frankivsk Oblast:

- have similar natural and climatic conditions (continental climate with warm summer) (Wikipedia, Lublin; Wikipedia, Ivano-Frankivsk);
- specialize in the production of plant products, in particular grains, potatoes, vegetables, legumes, etc. (State of Agriculture in Ivano-Frankivsk; City of Lublin; Marshal's Office);
- arouse the interest of investors, because (Ivano-Frankivsk region ranks first in the rating of investment attractiveness of regions of Ukraine, in particular, investment in agriculture is 7.8 %). Investments come from non-residents from more than 50 countries. The priority place in the investment economy belongs to the countries of the European Union (Foreign investments; City of Lublin);
- focus on export-import procedures (in 2021, the export of goods to European countries from the Ivano-Frankivsk region amounted to 777.8 million USD. In 2020, 66.7% of the total regional export volume of all goods had directed to Europe; volume of imports from European countries to Ivano-Frankivsk region reached 570.2 million USD). (Trade of Ivano-Frankivsk region). A high increase in the value of exported agricultural products of Poland has been observed after joining the EU, as the development of the agricultural sector accelerated with the appearance of EU funding and the opening of new foreign markets. The result of the export of agricultural products of Poland in 2019 may indicate the progressive fragmentation of exports (Miniszewski, 2021); (Kutwa, 2021).

The development of globalization processes and military actions in Ukraine requires the introduction of new approaches to economic activity based on the study of the best practices of agricultural producers in Poland. Thanks to the favourable natural environment and efficient use of land resources, agricultural producers in Poland provide their own needs for agricultural products.

As for the agrarian sphere of Ukraine's economy, today the development of its innovative activity is declining as a result of the crisis caused by: military actions. There is a decrease in product sales markets; the imperfection of the legislative framework; insufficient state stimulation of innovative activity; the limitation of internal and external sources of financing innovations and the impossibility of their quick mobilization, the low level of investment attractiveness of the industry, and especially the lack of innovations and modern technologies for the production and cultivation of agricultural products.

Before the beginning of start of the war in Ukraine, the level of development of the social and industrial base of agricultural producers made it possible to maintain the employment of workers, gradually increase wages, and partly with their own funds to train the necessary specialists and qualified workers; to maintain not only their own, but also rural social infrastructure. the situation changed with the beginning of Russia's attract on Ukraine. Over the past year, our countries have

undergone some changes, especially regarding the opening of the land market, military operations in Ukraine, and the rise in prices for agricultural products in Poland.

The peculiarities of the activity of agricultural producers in Poland can be called:

- agriculture has a positive effect on other sectors of the economy (Miniszewski, 2021); (Kutwa, 2021);
- agricultural producers cannot exist alone – their efficiency is the main indicator of the agriculture condition at the national, sectoral, and individual levels.

In our opinion, these indicators show current state and changes in evaluation effects, the dynamics of institutional transformations. They indicate important features and testify to the interrelationship of factors, resources and results.

The development and analytical presentation of performance indicators of agricultural producers will become the basis for making informed management decisions. As part of our research, we will conduct an assessment of the development of agricultural producers in Ukraine and Poland (Statistic Poland, 2010, 2015, ..., 2021).

Total area of Poland per capita is 0.828 ha (as of December 31, 2022), of which agricultural land is 0.366 ha. The population of Poland amounted to 37.8 million (as of December 31, 2022), in particular urban areas – 22.5 million and rural areas – 15.3 million. Employed people, including in agriculture, forestry, hunting and fishing in Poland amounted to 1.277 thousand (as of December 31, 2022). The share in gross value added (current prices) of agriculture, forestry, hunting and fishing was 2.8% in 2022 (Statistical Yearbook of Agriculture, 2022).

When analysing land use in Poland, it is advisable to take into account that the difference in the total area of agricultural enterprises and the area of agricultural land in 2010 is explained by the change in the definition of an agricultural enterprise, according to which agricultural enterprises do not include owners of agricultural land who are not engaged in agricultural activities, and owners of agricultural land up to 1 hectare engaged in small-scale agriculture (Statistic Poland). Information on Ukraine for 2015-2020 is presented without temporarily occupied territory occupied territories of Crimea, Donetsk and Luhansk regions.

According to the studied period, there were no significant changes in the area of agricultural land in Ukraine and Poland fig. 1.

As shown in fig. 1, in 2020 Lublin Voivodeship occupied 9.4% of the area of agricultural land. Ivano-Frankivsk region occupies only 1.5% of the total area of agricultural land in Ukraine, as Ivano-Frankivsk region is located in three zones: foothills, mountains, and plains. The efficiency of land use is precisely the set of qualitative and quantitative parameters of the appropriate use of land resources to achieve the set goals with the lowest costs and taking into account the socio-economic consequences of land use that may arise (Perovich et al., 2020).

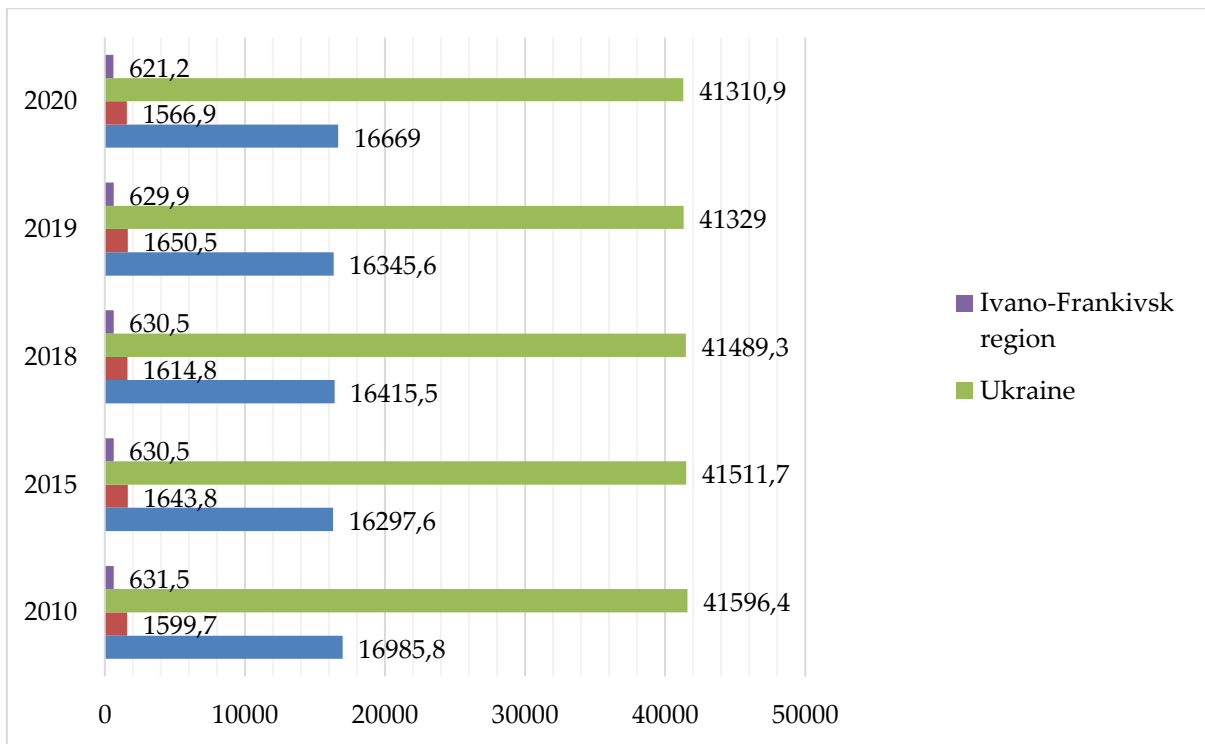


Fig. 1. Areas of agricultural land (at the end of the year), thousands of hectares

Source (Agriculture of Ivano-Frankivsk region 2021; Statistic Poland. 2010, 2015, ..., 2021; Agriculture of Ukraine. 2021)

The increase in the number of productive livestock (Table 1) also affected the effects of the production and economic process in animal husbandry in a certain way.

Tab. 1.

Number of animals per 100 ha of agricultural land, head

Livestock	Country, region	Years					
		2010	2015	2018	2019	2020	2020/2010, %
Cattle	Poland	37.4	39.6	42.2	42.6	42.7	114.17
	Lublin Voivodeship	25.0	25.1	26.8	26.8	26.1	104.40
	Ukraine	12.3	10.7	9.7	9.1	8.5	69.11
	Ivano-Frankivsk region	37.9	34.3	28.9	27.7	26.1	68.86
Pigs	Poland	99.4	72.8	75.2	76.4	79.8	80.28
	Lublin Voivodeship	69.9	36.3	31.6	31.6	33.0	47.21
	Ukraine	21.8	20.2	16.8	16.5	15.7	72.02
	Ivano-Frankivsk region	49.6	62.2	61.1	63.2	61.9	124.8

Source (Agriculture of Ivano-Frankivsk region 2021; Statistic Poland. 2010, 2015, ..., 2021; Agriculture of Ukraine. 2021)

The cattle heads of agricultural producers per 100 hectares of agricultural land in 2020 compared to 2010 increased by 5.3 heads (14.17 %) in Poland and 1.1 heads in the Lublin Voivodeship. The number of pigs decreased by 19.6 heads (19.72 %) among agricultural producers in Poland and by 36.9 heads (by 2.1 times) in the Lublin Voivodeship. The reduction of the number of pigs per 100 hectares of agricultural land in Poland does not keep up with the reduction of pig farms. At the beginning of 2020, about 120,000 farms in Poland kept pigs, but in 3 years more than half of all farmers abandoned this branch of livestock production due to the following factors: low profitability of production, losses

caused by the spread of the ASF epidemic, problems with selling pigs from the zones or high costs (In a year, the number of pigs in Poland decreased by over 600,000).

The analysis of the cattle population per 100 hectares of agricultural land in 2020 compared to 2010 in Ukraine and the Ivano-Frankivsk region shows a decrease by 3.8 heads (30.89 %) and by 11.8 heads (31.14 %), respectively. The number of pigs per 100 hectares of agricultural land in Ukraine decreased by 6.1 heads (27.98 %), and in the Ivano-Frankivsk region their growth was observed by 12.3 heads (24.8 %).

The application of relevant agrotechnical tools on a scientific basis is an important prerequisite for increasing crop yield in the future. As evidenced by the data in the table 2 in 2020, comparing with 2010, the yield of all major agricultural crops both in Ukraine and in Poland has an upward trend. With regard to potatoes, agricultural producers in Poland in 2020, compared to 2010, managed to increase the yield by almost 60 %, which is a positive factor due to the use of new technologies, modernization of production processes and processing methods, as well as due to the increase in global demand for grain. As for Ukraine, in 2020, compared to 2010, the yield increased by only 25 ts/ha.

Tab. 2.

Crop yield of agricultural crops, ts/ha

Types of agricultural products	Country, region	Years					
		2010	2015	2018	2019	2020	2020/2010 %
Grain yield	Poland	35.8	37.3	42.0	34.3	36.7	103.09
	Lublin Voivodeship	31.5	37	43.9	38.7	39.5	125.40
	Ukraine	26.9	41.1	47.4	49.1	42.5	157.99
	Ivano-Frankivsk region	29.2	45.1	50.0	50.1	54.2	185.62
Wheat	Poland	43.9	45.7	40.6	43.9	53.3	121.41
	Lublin Voivodeship	37.2	44.1	47.1	47.5	57.4	154.30
	Ukraine	27.1	38.9	37.3	41.6	38.0	140.22
	Ivano-Frankivsk region	24.8	44.1	45.0	45.2	44.2	178.23
Rye	Poland	26.8	27.8	24.2	27.2	35.1	130.97
	Lublin Voivodeship	23.6	29.5	26.2	26.4	33.0	139.83
	Ukraine	16.6	25.9	26.6	28.9	33.3	200.60
	Ivano-Frankivsk region	21.2	26.7	25.3	33.9	34.1	160.85
Barley	Poland	34.9	35.3	31.2	34.6	44.4	127.22
	Lublin Voivodeship	30.5	34.2	36.9	37.6	42.8	140.33
	Ukraine	22.4	31.2	33.5	36.7	32.7	145.98
	Ivano-Frankivsk region	23.9	43.0	39.4	43.9	43.9	183.68
Potato	Poland	211.0	210.0	251.4	214.1	347.7	164.79
	Lublin Voivodeship	266.0	214.0	279.9	195.1	397.8	149.55
	Ukraine	132.0	161.0	171.0	155.0	157.0	118.94
	Ivano-Frankivsk region	127.0	159.0	171.0	168.9	167.0	131.50
Sugar beets	Poland	483.0	520	598.6	574.7	608.3	125.94
	Lublin Voivodeship	479.0	518	586.6	534.4	540.4	112.82
	Ukraine	279.0	436.0	509.0	461.0	416.0	149.10
	Ivano-Frankivsk region	218.0	516.0	575.0	572.7	524.7	240.69
Rapeseed and suripitsa	Poland	23.6	28.5	26.1	27.1	31.9	135.17
	Lublin Voivodeship	22.1	24.8	29.9	26.1	29.8	134.84
	Ukraine	17.0	25.9	26.5	25.6	23.0	135.29
	Ivano-Frankivsk region	16.2	21.9	30.6	26.0	26.8	165.43

Source (Statistical Yearbook of Ukraine for 2020; Agriculture of Ukraine. 2021; Statistic Poland. 2010, 2015, ..., 2021; Agriculture of Ivano-Frankivsk region 2021)

The development of the soil protection system requires not only an increase in the amount of investments, but also an increase in the efficiency of their use. The production of plant products requires current calculations regarding the amount of fertilizers applied to crops and proper preparation of equipment, as well as obligates to monitor their preservation Table 3.

Tab. 3.

Using of mineral or chemical fertilizers (in accordance to pure components) op per 1 ha of agricultural land, kg

Country, region	Years					2020/2010 %
	2010	2015	2018	2019	2020	
Poland	114,7	123,2	141,6	130,0	133,0	115,95
Lublin Voivodeship	104,3	127,3	163,3	152,3	139,5	133,75
Ukraine	84,0	98,0	134,0	131,0	152,0	180,95
Ivano-Frankivsk region	78	114	120	142	167	214,10

Source (Statistic Poland. 2010, 2015, ..., 2021; Agriculture of Ivano-Frankivsk region 2021; Statistical Yearbook of Ukraine for 2020; Agriculture of Ukraine, 2011; Agriculture of Ukraine, 2020;)

One of the factors in the growth of the productivity of agricultural crops is the increase in the application of mineral fertilizers in the Ivano-Frankivsk region and in Ukraine. This trend is typical for most agricultural producers and other regions of Ukraine.

A positive factor in the development of animal husbandry is the increase in the productivity of cows (Table 4). Milk yields in 2020, compared to 2010, for agricultural producers in Poland increased by 32 %, and Ukraine also has a tendency to increase by 26 %. Such results are achieved due to the introduction of automated management systems (which monitor, collect and process individual biological information about animals, plan feeding rations, and also contain information on the grouping of cows that are subject to veterinary inspection), the purchase of high-yielding breeds of heifers and heifers to update the main herds.

Tab 4.

Average annual quantity of milk per cow, litres

Country, region	Year					2020/2010 %
	2010	2015	2018	2019	2020	
Poland	4487	5395	5747	5803	5946	132,52
Lublin Voivodeship	4078	5370	5603	5758	5547	136,02
Ukraine	3963	4509	4779	4831	4980	125,66
Ivano-Frankivsk region	3423	4756	4825	4815	4130	120,65

Source (Agriculture of Ivano-Frankivsk region 2021; Agriculture of Ukraine. 2021; Statistic Poland. 2010, 2015, ..., 2021)

The production of gross agricultural products is directed to the stable supply of the population of the states with high quality, affordable food products and food security. The structure of production of agricultural products by agricultural producers is presented in the table 5. The data for Ukraine and the Ivano-Frankivsk region are calculated in comparative prices of 2016, and the data for Poland and the Lublin Voivodeship are in current prices.

Tab. 5.

Structure of gross agricultural output by kind of product, %

Specification	Country, region	Years					2020/2010 percentage points
		2010	2015	2018	2019	2020	
Crop output	Poland	53,2	50,1	46,9	47,5	51,1	-2,1
	Lublin Voivodeship	-	-	-	-	-	
	Ukraine	70,5	75,9	78,9	79,1	77,3	+6,8
	Ivano-Frankivsk region	46,48	54,1	59,58	57,3	59,1	+12,62
Animal output	Poland	46,8	49,9	53,1	52,5	48,9	+2,1
	Lublin Voivodeship	-	-	-	-	-	
	Ukraine	29,5	24,1	21,1	20,9	22,7	-6,8
	Ivano-Frankivsk region	53,52	45,9	40,42	42,27	40,9	-12,62

Source (Agriculture of Ivano-Frankivsk region 2021; Statistic Poland. 2010, 2015, ..., 2021.; Agriculture of Ukraine. 2021)

During the period of 2010-2020 in Ukraine and Ivano-Frankivsk region, a growth of crop production was outlined, which in terms of value provides higher performance indicators and does not require significant labor costs. Agricultural producers in Poland were trying to maintain a balance in the production of plant and animal products.

To implement the positive experience of agricultural producers in Poland, based on the study of their characteristics, we were able to propose tools to activate the development of agricultural producers, which involves the feasibility of formalizing the appropriate organizational and economic mechanism (Fig. 2).

It is obvious that the effectiveness of the proposed mechanism for stimulating the development of agriculture, and within it agricultural enterprises, depends on the systemic impact of a number of macro-, meso- and micro-level factors, including the following: macroeconomic stability of the national economy, which allows for a strategic reorientation from the segment of solving structural security problems to the plane of expanded reproduction; institutional capacity to guarantee the fundamental principles of fair distribution of wealth.

Studying the activities of agricultural producers in Poland, it can be seen that their condition in 2010-2020 is gradually improving and the following factors had an impact on this:

- receipt of funds from the European Union;
- concentration of the agricultural sector (however, this does not always work, due to the fact that agricultural producers are forced to constantly increase the scale and intensity of production) (Czyżewski, 2018);
- increase in budget expenditures to support investments in agriculture (Kata, 2018);
- integration of agricultural producers (because its absence, as highlighted by Czyżewski (2018), provoked the following mistakes of the former Poland: the lack of integration of agricultural producers who "compete" on price instead of cooperating, and the imperfection of the food market, which is characterized by low price elasticity);
- implementation of technological solutions and investment in innovations in agriculture;
- improvement of product quality;
- new technologies in processing.

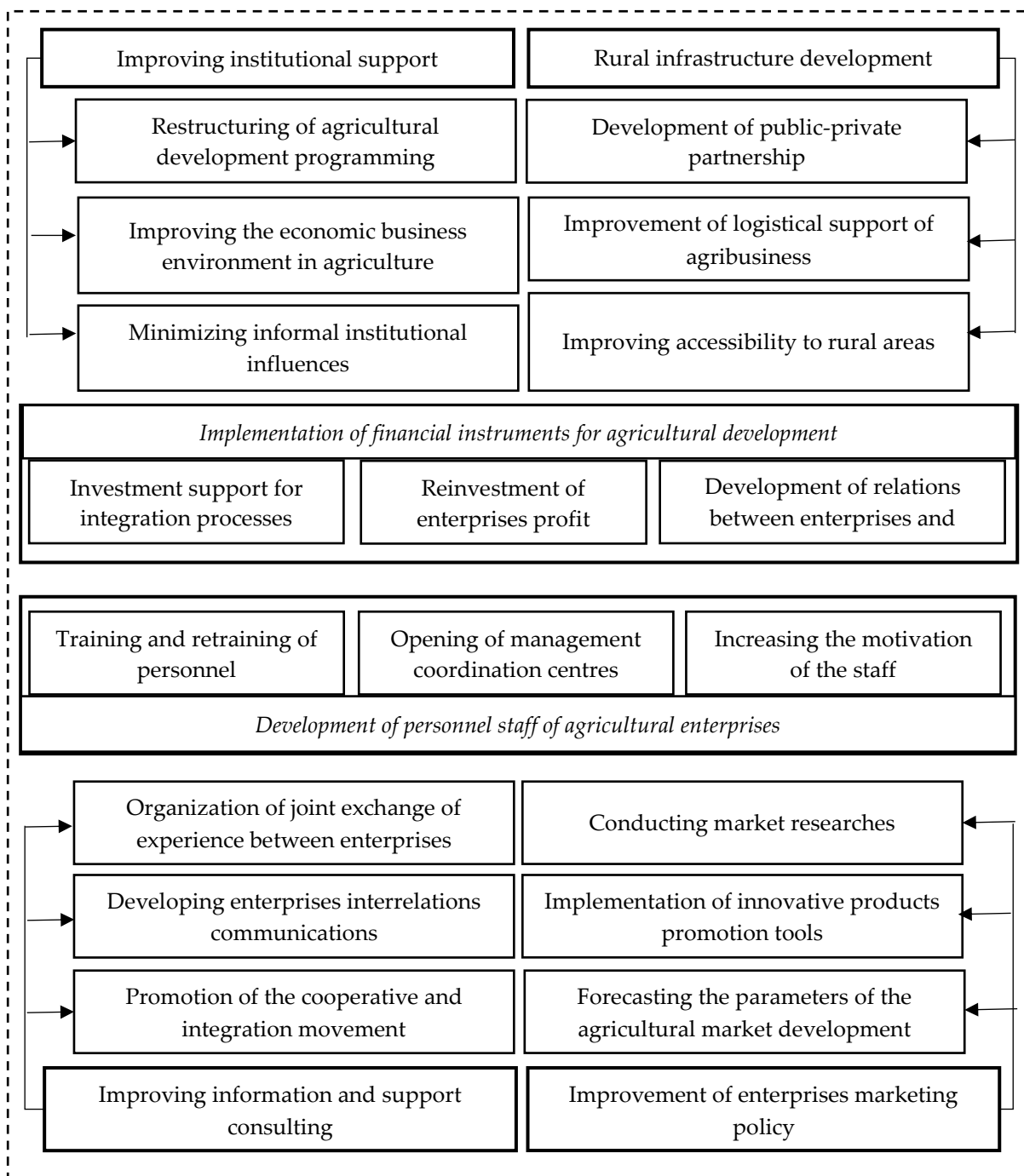


Fig. 2. Mechanism of stimulation of development of agricultural producers

Source: authors

In support of our research, there is an opinion (Yermakov & Kostetska, 2022) that agriculture is a strategic sector of the Ukrainian national economy, which contributes to food security and provides many jobs for the population, but also has many risks. Faced with risks in economic activity, it is advisable for agricultural producers of Ukraine to properly manage risks, since decisions made at the enterprise level will have an impact both on the state of their economic activity and on the situation in the industry, and therefore on the state of the economy (Kijek, 2013).

Zymaroeva (2018) proves that it is necessary to make qualitative changes in the activities of Ukrainian agricultural producers, with the use of economic costs and the introduction of the latest agrotechnological approaches in the cultivation of grain and leguminous crops, where Ukraine has the potential to be a safe supplier of them to world markets. Annual changes in productivity can be due to:

changes in weather conditions, depletion of fertility, the level of use of technological resources and management strategies, insufficient application of mineral fertilizers, etc. (Gerasimenko). The yield of vegetables depends on the placement of crops in natural and climatic zones, the level of mechanization of production processes, the state of selection and quality of vegetable seeds, the establishment of their marketing system, the use of modern mineral fertilizers and plant protection products (Shelenko, 2019).

However, despite the war, the agrarian food sector of Ukraine is holding on to be attractive for investment due to the present natural and climatic conditions, the relatively low cost of the main factors of production (land and labor), export orientation (Matkovskiy, 2019), high demand for products in international markets and proximity to the European market (Site Agroportal Working investment model).

4. CONCLUSION

The analysis of the achieved modern state of activity of agricultural producers in Poland and their potential made it possible to determine the list of features and development trends. It is obvious that the presence of influents of Ukraine war in on the further effective management of agricultural producers will require justification of systemic measures to overcome its negative impact.

First of all, it is advisable to organize and conduct an information and consultation campaign among agricultural producers of Ukraine to overcome certain established stereotypes and to eliminate negative factors as soon as possible using the power of mass media networks, to involve representatives of the scientific and expert environment in the field of agricultural development, to popularize existing successful practices of creating and the functioning of the activities of agricultural producers, to explain to the population the advantages of integrated forms of management.

For the gradual entry of Ukraine into the European Union, it is expedient to adopt a number of positive achievements in the activities of agricultural producers in Poland. It can be achieved through improving the infrastructure of the agricultural development and the establishment of integration processes (development of road and transport connections, development of a network of logistics facilities, properly realizing those potentials of Ukraine that it has, improvement of socio-economic infrastructure) through the introduction of practical implementation of infrastructure projects on the basis of public-private partnership of representatives of the authorities and agrarian business. Active participation in grant projects, which will ultimately form incentives for increasing bilateral interest and responsibility for the implementation of large-scale infrastructure projects into the agro-industrial complex through the pooling of resource capacities, will activate communication relationships between agricultural producers, will provide a structural impetus for the exchange of resources, experience and knowledge between Poland and Ukraine.

On the basis of the research, it can be distinguished that in order to improve cooperation between agricultural producers of Ukraine, it will be appropriate to establish optimal relations with all subjects of entrepreneurial activity. Such the development of relations leads to the establishment of close integration ties, including based on cooperation.

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Шеленко Діана, Аркадіуш Кієк, Олександр Шпикуляк. Визначення організаційно-економічних детермінант сучасного стану та тенденцій розвитку сільськогосподарських виробників Польщі та України. *Журнал Прикарпатського університету імені Василя Стефаника*, 10 (4) (2023), 17-30.

Досвід високорозвинених країн доводить, що сільськогосподарські товаровиробники є одним із стабілізуючих факторів соціально-економічних відносин держав. Зацікавленість науковців і практиків у підвищенні ефективності функціонування сільськогосподарських товаровиробників підтверджується тим, що це питання все частіше стає предметом дискусій на конференціях, симпозіумах, з'їздах. У контексті ефективного управління сільськогосподарськими товаровиробниками України та Польщі актуальним є з'ясування особливостей та тенденцій їх сучасного розвитку. Розроблено низку інструментів стимулювання розвитку сільського господарства, серед яких: удосконалення інституційного забезпечення; розвиток інфраструктури сільської місцевості; впровадження фінансових інструментів розвитку сільського господарства; кадрове забезпечення сільськогосподарських товаровиробників. Здійснено аналіз сучасного стану діяльності сільськогосподарських товаровиробників України та Польщі та вивчено досвід ведення господарської діяльності. Результати розрахунків можуть бути враховані для оперативного та стратегічного планування поведінки агровиробників та при розробці програм визначення пріоритетів розвитку агровиробників України. Метою дослідження є визначення тенденцій розвитку сільськогосподарських товаровиробників України та Польщі та розробка підходів до забезпечення їх ефективного функціонування. Застосовано системний підхід до вивчення умов і факторів, які комплексно впливають на розвиток сільськогосподарських товаровиробників. У дослідженні використано порівняльний аналіз основних економічних показників діяльності сільськогосподарських товаровиробників України та Польщі. Комплексний підхід дозволив провести дослідження основних показників діяльності сільськогосподарських товаровиробників із включенням до їх виробничої діяльності всієї сукупності соціально-виробничих складових, які, виступаючи в сукупності, мають забезпечити досягнення конкретної проміжної або кінцевої мети. Дослідження підтверджує кращі показники польського аграрного сектора, в порівнянні з українським у 2010-2020 роках. Інтеграційні процеси характерні для всіх галузей економіки, але в сільському господарстві, виходячи зі специфіки галузі, вони є найбільш необхідними і, як показує досвід підприємств Польщі та Люблінського воеводства, дають позитивні результати, як для сільськогосподарських виробників, так і для суспільства в цілому.

Ключові слова: сільське господарство, урожайність сільськогосподарських культур, продукція тваринництва, продукція рослинництва, тенденції розвитку.